- 10 rake without small amounts of vegetation and variances in soil
- 11 conditions clogging the catching and sifting means;
- wherein the catching and sifting means includes,
- a plurality of spaced fixed vanes, wherein the frame has a
- 14 top and a bottom and the vanes run across the bottom of the frame
- 15 from one side of the frame to the other side,
- 16 two pairs of rollers, one pair of rollers mounted on the one
- 17 side of the frame and the other pair of rollers mounted on the
- 18 other side of the frame, and The minesweeper recited in claim 4
- 19 wherein the catching and sifting means includes:
- 20 a pair of endless chains running across the top of the frame
- 21 and around the rollers.
 - 1 6. (Original) The minesweeper recited in claim 5 wherein the
 - 2 catching and sifting means includes:
 - 3 a plurality of spaced beams carried by the pair of chains,
 - 4 the beams lying across the spaced fixed vanes.
 - 1 7. (Original) The minesweeper recited in claim 6 wherein the
 - 2 catching and sifting means includes:
 - 3 a plurality of teeth mounted on the beams.
 - 1 8. (Original) The minesweeper recited in claim 7 wherein the
- 2 catching and sifting means includes:
- 3 means for turning the rollers to move the chains around a
- 4 loop so the teeth mounted on the beams rake sideways along the

- 5 vanes any mines, soil, rocks and other objects buried in the soil
- 6 passing over the rake and caught by the vanes, the teeth
- 7 partially meshing with the vanes and forcing the soil to fall
- 8 through while mines, and other objects larger than the vane
- 9 spacing are carried along the tops of the vanes and are ejected
- 10 to the side of the frame.
 - 1 9. (Original) In a minesweeper having a two-sided frame with a
 - 2 top and a bottom and adapted to be coupled to and pushed by a
 - 3 tractor, and a rake pivoted from each side of the frame by
 - 4 respective pairs of coupling bars of different lengths so that as
- 5 the rake moves away from the frame to bury itself in the soil,
- 6 the coupling bars rotate it to a less aggressive digging angle
- 7 that prevents the rake from stalling the tractor:
- 8 a plurality of spaced fixed vanes, wherein the frame has a
- 9 top and a bottom and the vanes run across the bottom of the frame
- 10 from one side of the frame to the other side;
- 11 two pairs of rollers, one pair of rollers mounted on the one
- 12 side of the frame and the other pair of rollers mounted on the
- 13 other side of the frame;
- 14 a pair of endless chains running across the top of the frame
- 15 and around the rollers,
- a plurality of spaced beams carried by the pair of chains,
- 17 the beams lying across the spaced fixed vanes;
- a plurality of teeth mounted on the beams; and,
- 19 a motor coupled to the rollers for turning the rollers to

- 20 move the chains around a loop so the teeth mounted on the beams
- 21 rake sideways along the vanes any mines, soil, rocks and other
- 22 objects buried in the soil passing over the rake and caught by
- 23 the vanes, the teeth partially meshing with the vanes and forcing
- 24 the soil to fall through while mines, and other objects larger
- 25 than the vane spacing are carried along the tops of the vanes and
- 26 are ejected to the side of the frame.
 - 1 10. (Original) The minesweeper recited in claim 9 in combination
 - 2 with the tractor.
- 1 15. (Currently Amended) In a method of sweeping mines including
- 2 the steps of:
- 3 pushing a two-sided frame and pivoting a rake from each side
- 4 of the frame by respective pairs of coupling bars of different
- 5 lengths so that as the rake moves away from the frame to bury
- 6 itself in the soil, the coupling bars rotate it to a less
- 7 aggressive digging angle; and
- 8 ____catching and sifting mines, soil, rocks and other objects
- 9 buried in the soil passing over the rake without small amounts of
- 10 vegetation and variances in soil conditions clogging the catching
- 11 and sifting means, wherein the catching and sifting step
- 12 includes:
- running a plurality of spaced fixed vanes across the bottom
- of the frame from one side of the frame to the other side,
- mounting one pair of rollers on one side of the frame,

- mounting another pair of rollers on the other side of the
- 17 frame, and
- 18 The method of claim 14 wherein the catching and sifting step
- 19 includes:
- 20 running an endless chain across the top of the frame and
- 21 around the rollers.
 - 1 16. (Currently Amended) The method of claim 14 15 wherein the
 - 2 catching and sifting step includes:
- 3 running another endless chain across the top of the frame
- 4 and around the rollers.
- 1 17. (Original) The method of claim 16 wherein the catching and
- 2 sifting step includes:
- 3 supporting a plurality of spaced beams on the pair of
- 4 chains, the beams lying across the spaced fixed vanes.
- 1 18. (Original) The method of claim 17 wherein the catching and
- 2 sifting step includes:
- 3 mounting a plurality of teeth on the beams.
- 1 19. (Original) The method of claim 18 wherein the catching and
- 2 sifting step includes:
- 3 turning the rollers to move the chains around a loop so the
- 4 teeth mounted on the beams rake sideways along the vanes any
- 5 mines, soil, rocks and other objects buried in the soil passing

- 6 over the rake and caught by the vanes, the teeth partially
- 7 meshing with the vanes and forcing the soil to fall through while
- 8 mines, and other objects larger than the vane spacing are carried
- 9 along the tops of the vanes and are ejected to the side of the
- 10 frame.
- 1 20. (Original) The method of claim 19 wherein the frame is pushed
- 2 by a tractor.